

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

APPLICANTS: Böss, *et al.*

SERIAL NO.: not assigned

FILING DATE: herewith

TITLE: Selective PDE2 Inhibitors as Pharmaceuticals for Improving Perception

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PRELIMINARY AMENDMENT

Assistant Commissioner for Patents  
Washington, D.C. 20231

Sir:

This Preliminary Amendment is submitted in the above-captioned application.  
Please amend the application as follows:

In the Claims

Please cancel claim 2.

Please amend claims 1 and 3-9 as shown in the attached sheets. A marked version of the claim set showing the changes made is also attached.

Remarks

By way of this Preliminary Amendment, claims 1 and 3-9 are pending. Claim 2 has been canceled, and claims 1 and 3-9 have been amended. These claim cancellations and amendments are being made solely for purposes of placing the claims in a format appropriate for U.S. prosecution. No new matter was added by way of these amendments.

More specifically, claims 1 and 3-9 are being amended to convert the Swiss-type use claim to the U.S. method of treatment format. Applicants submit that all of these amendments do not change the scope of the claims as originally filed, because the amendments are being made solely to place the claims in a format appropriate for U.S. prosecution. Such amendments are therefore made to address formalities in the claim format and are not related to the patentability of the subject matter of the claims.

Conclusion

Applicants believe that the subject matter of the pending claims is patentable and that the instant application should accordingly be allowed. If the Examiner believes that a conversation with Applicants' attorney would be helpful in expediting prosecution of this application, the Examiner is invited to call the undersigned attorney at (203) 812-3964.

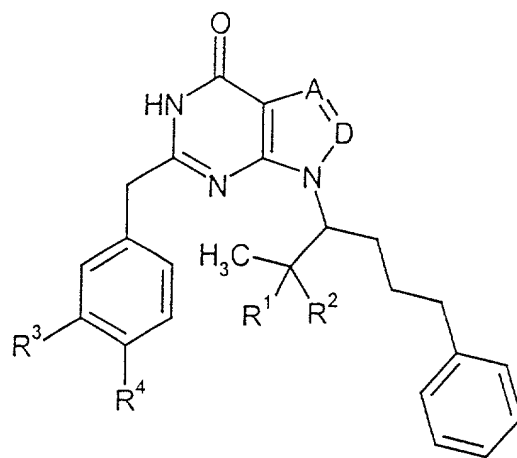
Respectfully submitted,

Dated: July 23, 2001  
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Amended Claims for Attorney Docket No. Le A 34 494

1. (Amended) A method of improving perception, concentration, learning and/or memory, comprising administering to a mammal a selective PDE2 inhibitor.
2. Canceled
3. (Amended) The method of Claim 1, where a disorder of perception, concentration, learning and/or memory is a result of dementia.
4. (Amended) The method of Claim 1, where a disorder of perception, concentration, learning and/or memory is a result of stroke or craniocerebral trauma.
5. (Amended) The method of Claim 1, where a disorder of perception, concentration, learning and/or memory is a result of Alzheimer's disease.
6. (Amended) The method of Claim 1, where a disorder of perception, concentration, learning and/or memory is a result of Parkinson's disease.
7. (Amended) The method of Claim 1, where a disorder of perception, concentration, learning and/or memory is a result of depression.
8. (Amended) The method of Claim 1, where a disorder of perception, concentration, learning and/or memory is a result of dementia with frontal lobe degeneration.
9. (Amended) The method of Claim 1, where the selective PDE2 inhibitor is a compound of the general formula (I)



in which

A=D represents N=N, N=CH or CR<sup>5</sup>=N, in which R<sup>5</sup> denotes hydrogen, methyl, ethyl or methoxy,

R<sup>1</sup> and R<sup>2</sup> represent, together with the adjacent carbon atom, hydroxy-methylene or carbonyl, and

R<sup>3</sup> and R<sup>4</sup> represent independently of one another methyl, ethyl, methoxy, ethoxy or a radical of the formula SO<sub>2</sub>NR<sup>6</sup>R<sup>7</sup>,

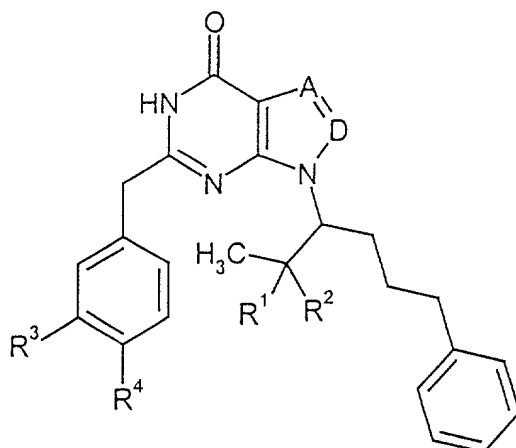
in which

R<sup>6</sup> and R<sup>7</sup> denote, independently of one another, hydrogen, C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>3</sub>-C<sub>7</sub>-cycloalkyl, or

R<sup>6</sup> and R<sup>7</sup> form, together with the adjacent nitrogen atom, an azetidine-1-yl, pyrrol-1-yl, piperid-1-yl, azepin-1-yl, 4-methylpiperazin-1-yl or morpholin-1-yl radical,

or one of its salts.

1. (Amended) A method of [Use of selective PDE2 inhibitors for producing pharmaceuticals for] improving perception, concentration, learning and/or memory, comprising administering to a mammal a selective PDE2 inhibitor.
2. Canceled
3. (Amended) The method of [Use according to] Claim [2] 1, where [the] a disorder of perception, concentration, learning and/or memory is a result of dementia.
4. (Amended) The method of [Use according to] Claim [2] 1, where [the] a disorder of perception, concentration, learning and/or memory is a result of stroke or craniocerebral trauma.
5. (Amended) The method of [Use according to] Claim [2] 1, where [the] a disorder of perception, concentration, learning and/or memory is a result of Alzheimer's disease.
6. (Amended) The method of [Use according to] Claim [2] 1, where [the] a disorder of perception, concentration, learning and/or memory is a result of Parkinson's disease.
7. (Amended) The method of [Use according to] Claim [2] 1, where [the] a disorder of perception, concentration, learning and/or memory is a result of depression.
8. (Amended) The method of [Use according to] Claim [2] 1, where [the] a disorder of perception, concentration, learning and/or memory is a result of dementia with frontal lobe degeneration.
9. (Amended) The method [Use according to any] of Claim[s] 1 [to 8], where the selective PDE2 inhibitor is a compound of the general formula (I)



in which

A=D represents N=N, N=CH or CR<sup>5</sup>=N, in which R<sup>5</sup> denotes hydrogen, methyl, ethyl or methoxy,

R<sup>1</sup> and R<sup>2</sup> represent, together with the adjacent carbon atom, hydroxy-methylene or carbonyl, and

R<sup>3</sup> and R<sup>4</sup> represent independently of one another methyl, ethyl, methoxy, ethoxy or a radical of the formula SO<sub>2</sub>NR<sup>6</sup>R<sup>7</sup>,

in which

R<sup>6</sup> and R<sup>7</sup> denote, independently of one another, hydrogen, C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>3</sub>-C<sub>7</sub>-cycloalkyl, or

R<sup>6</sup> and R<sup>7</sup> form, together with the adjacent nitrogen atom, an azetidine-1-yl, pyrrol-1-yl, piperid-1-yl, azepin-1-yl, 4-methylpiperazin-1-yl or morpholin-1-yl radical,

or one of its salts.